

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently Amended) A method for responding to a request, comprising:
 - accepting the request;
 - generating a control tree based on the request;
 - mapping the request to the control tree wherein the control tree is a logical representation of ~~a control taxonomy that is associated with~~ a graphical user interface (GUI), wherein the control tree includes a set of controls which represent corresponding graphical and functional elements in web applications and are related hierarchically to one another ~~including at least one portlet control that represents at least one portlet, wherein the set of controls includes a plurality of portlets wherein each of the plurality of portlets is a self-contained application implemented on one or more web servers that renders its own GUI and is capable of communicating with another portlet of the plurality of portlets;~~
 - advancing the control tree through at least one lifecycle stage based on the request, wherein the set of controls in the control tree operates to interact with each other and produce response based on the request in the at least one lifecycle stage;
 - providing the request to a portlet container that contains the at least one portlet; and
 - aggregating the output of each of the at least one portlets and providing the output to the GUI.
2. (Canceled).
3. (Original) The method of claim 1, further comprising:
 - generating a response wherein the response can be used to render at least a portion of the GUI.
4. (Currently Amended) The method of claim 1 wherein the step of generating a control tree ~~from the factory~~ comprises:

creating a metadata representation of a control tree; and
generating a class to construct the control tree based on the metadata representation.

5. (Original) The method of claim 1 wherein:

the request is a hypertext transfer protocol request (HTTP); and
the request originates from a web browser.

6. (Original) The method of claim 3, further comprising:

providing the response to a web browser.

7. (Original) The method of claim 1 wherein:

the control tree is advanced through the at least one lifecycle stage by an interchangeable lifecycle component.

8. (Original) The method of claim 1 wherein:

each one of the set of controls can have an interchangeable persistence mechanism.

9. (Original) The method of claim 1 wherein:

each one of the set of controls can render itself according to a theme.

10. (Original) The method of claim 1 wherein:

each one of the set of controls can interact with another one of the set of controls.

11. (Original) The method of claim 1 wherein:

one of the set of controls can advance through the series of at least one lifecycle stage in parallel with another of the controls.

12. (Original) The method of claim 1 wherein:

a lifecycle stage is one of: init, load state, create child controls, load, raise events, pre-render, render, save state, unload and dispose.

13. (Original) The method of claim 3 wherein:

the response is an hypertext transfer protocol (HTTP) response.

14. (Original) The method of claim 1 wherein:

controls can raise events and respond to events.

15. (Original) The method of claim 1 wherein:

each one of the set of controls can be one of: Book, Page, Window, Menu, Layout, Portlet, Theme, Placeholder, Shell, LookAndFeel, Desktop, Body, Footer, Header, Head, Titlebar, ToggleButton, TreeView, TreeViewWithRadioButtons.

16. (Currently Amended) A method for responding to a request, comprising:

accepting the request;

generating a control tree based on the request;

mapping the request to the control tree wherein the control tree is a logical representation of ~~a control taxonomy that is associated with~~ a graphical user interface (GUI), wherein the control tree includes a set of controls which represent corresponding graphical and functional elements in web applications and are related hierarchically to one another ~~including at least one portlet control that represents at least one portlet, wherein the set of controls includes a plurality of portlets wherein each of the plurality of portlets is a self-contained application implemented on one or more web servers that renders its own GUI and is capable of communicating with another portlet of the plurality of portlets;~~

advancing the control tree through at least one lifecycle stage based on the request, wherein the set of controls in the control operates to interact with each other and produce response based on the request in the at least one lifecycle stage;

providing the request to a portlet container that contains the at least one portlet;

aggregating the output of each of the at least one portlets and providing the output to the portal GUI; and

generating a response wherein the response can be used to render at least a portion of the GUI.

17. (Canceled).

18. (Currently Amended) The method of claim 16 wherein the step of generating a control tree ~~from the factory~~ comprises:

creating a metadata representation of a control tree; and
generating a class to construct the control tree based on the metadata representation.

19. (Original) The method of claim 16 wherein:

the request is a hypertext transfer protocol request (HTTP); and
the request originates from a web browser.

20. (Original) The method of claim 16, further comprising:

providing the response to a web browser.

21. (Original) The method of claim 16 wherein:

the control tree is advanced through the at least one lifecycle stage by an interchangeable lifecycle component.

22. (Original) The method of claim 16 wherein:

each one of the set of controls can have an interchangeable persistence mechanism.

23. (Original) The method of claim 16 wherein:

each one of the set of controls can render itself according to a theme.

24. (Original) The method of claim 16 wherein:

each one of the set of controls can interact with another one of the set of controls.

25. (Original) The method of claim 16 wherein:

one of the set of controls can advance through the series of at least one lifecycle stage in parallel with another of the controls.

26. (Original) The method of claim 16 wherein:

a lifecycle stage is one of: init, load state, create child controls, load, raise events, pre-render, render, save state, unload and dispose.

27. (Original) The method of claim 16 wherein:

the response is an hypertext transfer protocol (HTTP) response.

28. (Original) The method of claim 16 wherein:

controls can raise events and respond to events.

29. (Original) The method of claim 16 wherein:

each one of the set of controls can be one of: Book, Page, Window, Menu, Layout, Portlet, Theme, Placeholder, Shell, LookAndFeel, Desktop, Body, Footer, Header, Head, Titlebar, ToggleButton, TreeView, TreeViewWithRadioButtons.

30. (Currently Amended) A machine readable storage medium having instructions stored thereon that when executed by a processor cause a system to:

accept [[the]] a request;

generating generate a control tree based on the request;

map the request to the control tree wherein the control tree is a logical representation of a control taxonomy that is associated with a graphical user interface (GUI), wherein the control tree includes a set of controls which represent corresponding graphical and functional elements in web applications and are related hierarchically to one another including at least one portlet control that represents at least one portlet, wherein the set of controls includes a plurality of portlets wherein each of the plurality of portlets is a self-contained application implemented on one or more web servers that renders its own GUI and is capable of communicating with another portlet of the plurality of portlets;

advance the control tree through at least one lifecycle stage based on the request, wherein the set of controls in the control tree operates to interact with each other and produce response based on the request in the at least one lifecycle stage;

provide the request to a portlet container that contains the at least one portlet; and

aggregate the output of each of the at least one portlets and providing the output.

31. (Canceled).

32. (Original) The machine readable medium of claim 30, further comprising instructions that when executed cause the system to:

generate a response wherein the response can be used to render at least a portion of the GUI.

33. (Currently Amended) The machine readable medium of claim 30, further comprising instructions that when executed cause the system to:

create a metadata representation of [[a]] the control tree; and

generate a class to construct the control tree based on the metadata representation.

34. (Original) The machine readable medium of claim 30 wherein:

the request is a hypertext transfer protocol request (HTTP); and

the request originates from a web browser.

35. (Original) The machine readable medium of claim 32, further comprising instructions that when executed cause the system to:

provide the response to a web browser.

36. (Original) The machine readable medium of claim 30 wherein:

the control tree is advanced through the at least one lifecycle stage by an interchangeable lifecycle component.

37. (Original) The machine readable medium of claim 30 wherein:

each one of the set of controls can have an interchangeable persistence mechanism.

38. (Original) The machine readable medium of claim 30 wherein:

each one of the set of controls can render itself according to a theme.

39. (Original) The machine readable medium of claim 30 wherein:

each one of the set of controls can interact with another one of the set of controls.

40. (Original) The machine readable medium of claim 30 wherein:

one of the set of controls can advance through the series of at least one lifecycle stage in parallel with another of the controls.

41. (Original) The machine readable medium of claim 30 wherein:

a lifecycle stage is one of: init, load state, create child controls, load, raise events, pre-render, render, save state, unload and dispose.

42. (Original) The machine readable medium of claim 32 wherein:

the response is an hypertext transfer protocol (HTTP) response.

43. (Original) The machine readable medium of claim 30 wherein:

controls can raise events and respond to events.

44. (Original) The machine readable medium of claim 30 wherein:

each one of the set of controls can be one of: Book, Page, Window, Menu, Layout, Portlet, Theme, Placeholder, Shell, LookAndFeel, Desktop, Body, Footer, Header, Head, Titlebar, ToggleButton, TreeView, TreeViewWithRadioButtons.

45. (Canceled).

46. (Currently Amended) A method for rendering a graphical user interface (GUI), comprising:

accepting a request;

mapping a request to a control tree factory;

generating [[the]] a control tree from the control tree factory;

evaluating the control tree based on the request; and

providing a response,

wherein ~~the control tree represent a particular instance of a control taxonomy and a~~ control within the control tree represents a corresponding graphical and functional element in a web application and operates to process the request, interact with each other and produce a response, wherein the control tree includes a plurality of portlets wherein each of the plurality of portlets is a self-contained application implemented on one or more web servers that renders its own GUI and is capable of communicating with another portlet of the plurality of portlets.

47. (Previously Presented) The method of claim 46 further comprising:

running the control tree through a sequence of one or more lifecycles by employing an interchangeable lifecycle driver.

48. (Previously Presented) The method of claim 46 wherein:

a “wire-up” service is used in the control tree factory that cause the control tree factory to return a root of a control tree.

49. (Previously Presented) The method of claim 46, further comprising:

associating a context with a root of the control tree.